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Virginia Wildlife

Dedicated to the Conservation of Virginia's Wildlife and Related Natural Resources and to the Betterment of Outdoor Recreation in Virginia

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MAY

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COVER: Shy and wild and seldom seen by man except by accident, the bobcat with his silent tread, blazing eyes and lightning-fast pounce is one of the most efficient hunters with which ground-nesting woodland birds must contend in the never ending contest for survival. Our artist: Clarence Tillenius.

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GUEST EDITORIAL

Crazy ?

A FEW weeks back I took advantage of a holiday to take off down the country, leaving town early in the morning and coming back around 8 o'clock that night. I spent a most enjoyable day during which I accomplished absolutely nothing constructive. Instead of cleaning up some brush as I'd promised myself, I wandered around and picked some wild flowers that, as usual, I couldn't identify from the reference book; instead of fishing, I sat on the dock and fed crackers and stale bread to the bream and watched for the shadowy forms of bass out in the deeper water, leaving the fishing to a noisy kingfisher across the pond; and about noon I ate a can-opener lunch.

I dozed off for a pleasant hour and then got up to spend the afternoon walking lazily through the woods—watching and listening to the birds, studying the tracks of animals in the damp places, and giving not a thought to the troubles of the world, except to be unconsciously thankful they were far from me. Every 15 or 20 minutes I'd stop and sit motionless on a stump or log and let the woods come to life, realizing how much life there is if you'll take the trouble to be still and look for it.

I lost a staring match with a big chicken snake when I was unable to longer resist scratching my nose, the snake going slithering off through the bushes at my first movement. A little warbler flitted fitfully through the branches, never letting me get close enough to identify it, and a raucous pileated woodpecker went cackling in undulating flight across a pond.

There was nothing remarkable about the day except for one thing —I did not see another human being from the time I turned off the highway that morning until I reached it again that night; and, as far as I can recall, I had not an envious or mean thought all day.

The next day I happened to mention to a couple of people how I had spent my holiday and they looked at me as if I were crazy. Perhaps I am but I like it and I believe the world would be a lot better off if there were more crazy people; and more places where people could be crazy in peace.—E. F.*

(*Written by Editor* EDDIE FINLAY* *for* South Carolina Wildlife, *quarterly publication of South Carolina Wildlife Resources Department, and reprinted by permission.*)

LETTERS

Whitetail Deer Not Mute

I receive VIRGINIA WILDLIFE at my home in Marion, Virginia, and enjoy it very much every time I am home.

While reading the February issue (article on Sika deer by Vagn Flyger) I saw something that made me wonder. It stated that the whitetail deer makes no sound except when it snorts.

Now I have heard a kind of harking noise in the woods of Grayson County before seeing a whitetail go loping off. If the deer doesn't make such a noise, what does?

Walter W. Williams
Washington, D. C.

Reader Williams is correct. The whitetail is not mute. It has a voice, but just doesn't use it very often.—Ed.

Oldsquaw Sightings

A letter from Philip Allan in the January VIRGINIA WILDLIFE reported an oldsquaw duck observed in Bath County last November. Dr. Murray's Checklist mentions the oldsquaw as being a casual visitor inland with records at Charlottesville, Lynchburg, Danville, Lexington, Blacksburg and New River.

I have been keeping records on birds since 1947 and have only 2 records. Five were on Silver Lake in Dayton March 12, 1947 (Rockingham County). Jim Engle reported one seen at Camp Shenandoah on their lake (Augusta County) on November 19, 1963.

It was interesting to note the Bath County bird was seen also on November 19, one year later.

Max Carpenter
Game Biologist

He Learned From An Expert

YOU have been most kind in telling the story of my grandson's training as a fisherman, recording his progress to the point of his boasting of his skill in finally beating his Papa. Now let me present final proof he has indeed become an expert fisherman.

Not long ago I took him on a fishing trip to our favorite pond. We had good luck with the bream, but the bass were too small to keep. Finally, by using a weighted fly on my spinning rod, I caught an eighteen inch bass weighing over three pounds. As my grandson needed it to complete a fish dinner for his family, I gave it to him.

A few days later his mother surprised me by telling how proud he was of the big fish he had caught. I looked at him, and he grinned and said, "I was just joking, Papa." Then it was I knew he had mastered all techniques of fishing including fib- eh, exaggeration. And as he had heard me relate my own fishing tales, I knew how he acquired his skills.

(By the way—the fish was about fourteen inches long and weighed a pound and a half.)

Sam Vanderslice
Falls Church

Go on, Sam. If it was a foot long and weighed a pound we'll eat it!—Ed.

YOU DON'T HAVE TO TAKE THOSE ANTI-FIREARM TV EDITORIALS

LYING DOWN!

HUNTERS and shooters who are fed up with radio and TV editorials supporting antifirearm legislation don't have to take these attacks lying down.

Under the little-known Fairness Doctrine of the Federal Communications Commission, they have the right to request the use of the station's time and facilities to rebut a one-sided editorial.

If the station ignores the request, sportsmen should complain to the FCC in Washington—E. William Henry, Chairman. The FCC has the power to withhold a station's license if it is not living up to the Fairness Doctrine.

The right to rebuttal stems from the fact that broadcasters use public property—the airwaves—to broadcast, and they are therefore licensed by the FCC only so long as they operate in the public's interest. As for editorials, the FCC made its position quite clear in 1940 when they said: "In carrying out the obligation to render a public service, stations are required to furnish well-rounded rather than one-sided discussions of public issues."

Editorials on many stations have been anything but "well-rounded." Typically, they ignore the fact that there are 20 million law-abiding hunters and shooters in the country who have no connection with the criminal misuse of firearms.

An antifirearm editorial which pays no heed to the sportsman's side of the case is clearly a violation of the Fairness Doctrine and any station which does not grant the opportunity for the presentation of opposing views is in danger of losing its license.

The FCC has general rules to police the doctrine, but leaves it up to the station to make "reasonable judgments in good faith" on granting time. For example, the station does not have to grant "equal time" as the provision applies only to political candidates. But they do have to give you a "reasonable opportunity" to present the case. Obviously, if you are allotted a minute to rebut a 30-minute editorial, you would have a good case for complaining to the FCC.

The station also has a say in choosing a spokesman. As a general rule, however, stations will tend to favor spokesmen representing responsible sportsmen's groups rather than one person speaking for himself.

The following are guidelines for sportsmen requesting air time:

—First, check your facts. Did you hear the entire program or only part of it? Was it an editorial, a news program, a documentary, or a panel discussion?

—Write the station manager, asking for a printed copy of the program or editorial. You'll get faster action if you indicate in your letter that you have sent a copy of it to the FCC (E. William Henry, Chairman, Washington, D. C. 20554).

—If the program still seems one-sided in print, make a written request for time to present your arguments, including a brief summary of what your arguments are. Make an appointment with the station manager to work out other details.

Should the station not grant your request, you have the right to make a strong complaint to the FCC. Basically, they will need the following information to make a ruling: (1) the particular station involved; (2) the particular issue of a controversial nature discussed over the air; (3) the date and time when the program was carried; (4) the basis for the claim that the station presented only one side of the question; and (5) whether the station afforded, or has plans to afford, an opportunity for contrasting viewpoints.

Hunters and shooters who want *facts* on firearms use and legislation can get free literature by writing the National Shooting Sports Foundation, Riverside, Connecticut.

NSSF has a variety of publications with information that will be helpful to sportsmen if unduly restrictive legislation is proposed or supported in their state, county or city.

SFI Commends County Recreation Leadership in Virginia

THE Sport Fishing Institute, a national organization headquartered in Washington, whose avowed purpose in life is to "help shorten the time between bites," publishes the following evaluation of Virginia's Burke Lake project under the heading "County Recreation Leadership":

"Badly needed in the Northern Virginia area near Washington, D. C., 218-acre Burke Lake was constructed by the Virginia Game and Inland Fisheries Commission and opened to public fishing May 25, 1963. It was conceived as a cooperative multiple-use project with the Fairfax County Park Authority. During the first full season of operation (December 1, 1963 to November 30, 1964), the Authority reported person-visits to Burke Lake Park totalling 190,767. At least half—over 95,000—were for the purpose of fishing. There were 440 fishing trips per acre of water. In addition to the fishing provided by the lake, the Park Authority developed camping, picnicking, and other mutually-stimulating related outdoor recreational activities on 532 acres adjacent to the lake.

"The lake was constructed by the Commission under the D-J (Federal Aid to Fish Restoration) program at a cost to the Commission of $148,180 (75 per cent reimbursed from D-J funds, derived from excise taxes paid on the manufacture of fishing tackle). The necessary land for the lake basin was acquired at a cost of about $100,000, partly through public subscription, and deeded to the Commission by the County authority. The Park Authority was granted concession privileges for the lake, and the Commission's Fish Division provided the necessary initial stocking and subsequent fish management.

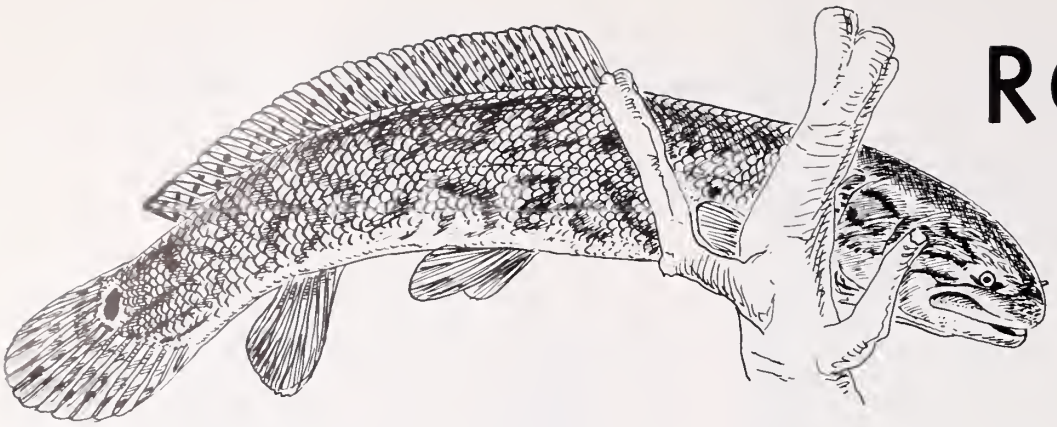
"No daily charge is made for fishing the lake although there is a modest charge for launching private boats at a prepared area. Boats are available for rental and live bait for fishing may be purchased. Boat rental income was $19,114 from some 25,000 fishermen. In addition, 58,675 minnows, 46,226 crickets and about 105,000 worms were sold as bait in the four-month period, August through November. Total revenue from concessions amounted to $42,261. The lake is managed to provide fishing for bluegills, redear sunfish, largemouth bass, and channel catfish. Fishing has proved to be excellent.

"In a progress report on the project, Commission fishery chief Robert G. Martin had this to say in conclusion: 'Without question Burke Lake has received the highest usage of any of the 16 Commission constructed lakes. A great deal of the credit for this should be given the *multiple use concept* associated with the development of related outdoor recreational activities by the Park Authority on lands around the lake. Fishing and these other activities were complementary and no use friction was apparent. More fishing was done by family groups at Burke than at other Commission facilities. Future public fishing lake development by the Commission should be guided by this example, with every emphasis placed on entering into similar agreements with other public agencies entrusted with providing outdoor recreation.'

"This is an outstanding recent example of the leadership long displayed throughout the nation by the state fish and game (or conservation) departments in developing significant outdoor recreation facilities near urban and suburban concentrations. This leadership was, indeed, the forerunner and partial stimulant to the recently popularized 'new look' in outdoor recreation—to the tune of about $170,000,000 in capital outlay for construction of public community fishing lakes alone. For this sum, nearly 1,250 such lakes comprising over 270,000 acres of surface water have been constructed through 1964 in 46 states since the close of World War II, largely since 1950. These provide in excess of 27 million recreational fishing days annually. In addition 7.7 million acres of lakes and streams have been made newly or better accessible through expenditure of $42.7 million for land acquisition and development for boat-fishing access in 42 states.

"This is the kind of activity that contributes most substantially to recreational opportunity at the local level, which a new booklet, *County Action for Outdoor Recreation*, seeks to stimulate. Unfortunately, the booklet is short on specific examples of what to do, among the best being the cooperative multiple-use fishing lake park development so well exemplified by Burke Lake Park in Fairfax County, Virginia. Nevertheless, many useful tips are to be found in the 48-page booklet, available for 25 cents per copy, postpaid, from the Citizens Committee for the ORRRC Report, 1001 Connecticut Ave., Washington, D. C. 20036."

Burke Lake fishing has held up remarkably well in spite of heavy angling pressure. Good initial site selection, a balanced population of predators and panfish, regular fertilization of the water, and a twelve-inch size limit on bass have contributed to the success of this effort in intensive fish management.

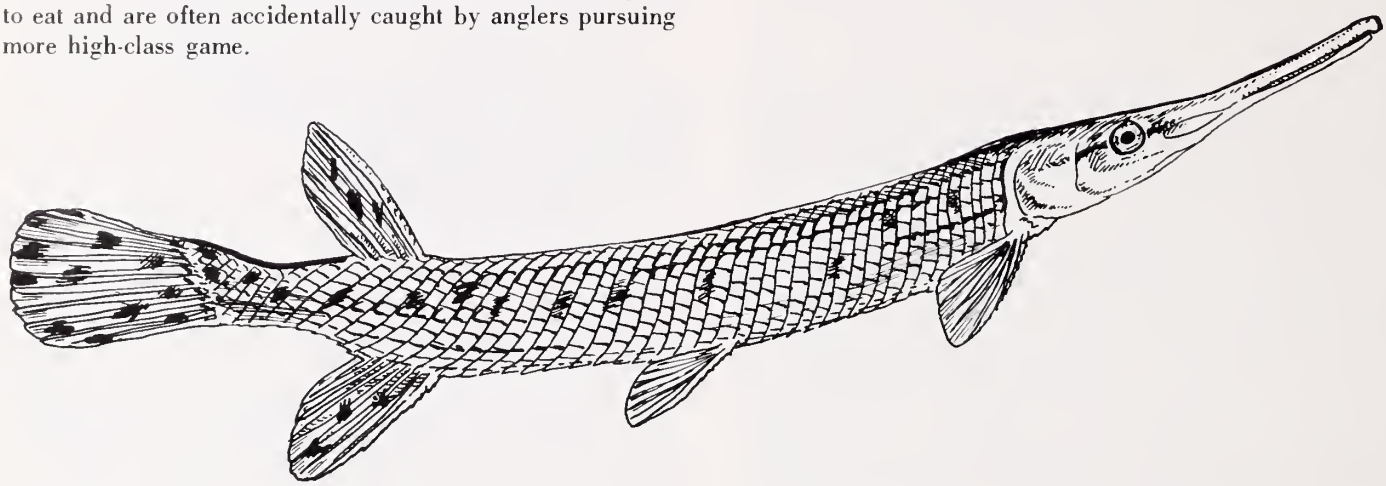


ROUGH-NECKS THREE

THE bowfin, carp and gar are considered by many anglers to be leading candidates for Angling's Hall of Infamy. Their collective status as rough fish suits them perfectly. Fish just don't come any rougher. There's not a gentlemanly bone in their bony bodies.

A big reason why these fish strike out in the popularity contests is that they are not generally considered to be good to eat and are often accidentally caught by anglers pursuing more high-class game.

By MAJOR JACK RANDOLPH
Petersburg



Two of these characters are native to Virginia, but the third, carp, is mischief borrowed from Europe. The Europeans think a lot more of the carp than we do. They consider him to be a wily customer (which he is) and they hold him in high esteem. This esteem doesn't stop at the dinner table where carp is a delicacy. In Germany "Karpfen Blau" is commonplace in the better restaurants.

Back in the 19th century our ancestors began to have a hankering for a mess of carp, so they brought a bunch over from the Old Country in 1877. This wasn't hard to do, even in 1877, since it's harder to kill a carp than it is to keep him alive. They spread like wildfire and pretty soon everybody had a mess of carp. Today there is hardly a state that doesn't have a carp population.

With their "vacuum cleaner" snouts carp feed along the bottom inhaling aquatic insects and vegetable matter. Their feeding techniques are such that in shallow water they may constantly keep the water muddied to the extent that sunlight fails to penetrate adequately. This interferes with nature's wonderful, food producing process known as photosynthesis. Thusly, carp can cut deep inroads into the available food supply to the detriment of the more desirable species. This problem occurs primarily in shallow, soft-bottomed waters.

The carp isn't a pure vegetarian; in fact, some authorities say that he eats more animal than vegetable matter. Although he has no teeth the carp is well equipped to handle a wide variety of chow with a set of grinders placed well back in his throat. With these he can handle such delicacies as worms, insects, crawfish, and other animal life. Every now and then, either by design or accident, he scoops up an artificial bait. This creates an interesting situation with a very surprised character at each end of the line.

Old bugle mouth has a place in the American angling scene. He will inhabit, in fact flourish in, waters that other fish cannot tolerate, providing some angling where otherwise there would be none. And carp fishing is not a dull sport; it can get downright nerve-wracking at times.

Despite his bottom hugging feeding habits, carp can be spectacular. Often, perhaps in play, they leap high into the air and return to the water with a thunderous, tail-flapping slap. At first you may believe that it was a mammoth bass that jumped but with experience it is easy to recognize the typical tail flip of a carp.

Once, on the Chickahominy River below the dam, I saw a tremendous school of fish breaking water at a distance. Thinking that they were rockfish, I cranked up the motor and took off in hot pursuit. My blood pressure was up but took a sudden drop as I made out the telltale golden hue of leaping carp.

Many anglers underrate carp as an antagonist at the fightin' end of a line. In truth these fish exhibit true old-world sagacity in taking the hook and great, bull-like power once they have been fooled.

Many serious carp anglers pre-bait the area to be fished. A couple cans of whole kernel corn or cut string beans are great for baiting an area to be fished. It is best to bait an area for several days prior to fishing, but often this is not possible. In such cases bait the area at the start of your fishing and use the same bait on your hooks. It is also a good trick to bait several areas as you start out your day and make the rounds of the baited spots until you connect.

Use small but sturdy hooks for carp. Size 4 or 6 are fine. Some anglers use small treble hooks with much success. The big secret in carp fishing is to convince the carp that you are someplace else. To catch many you have to be very quiet. A carp can spot a phony rig a mile away, so use the lightest line possible and a sliding sinker. If a carp feels the slightest drag, he leaves fast and without the bait.

No savage strikes will you have from carp as a rule. Despite his bulk and roughness he has delicate table manners. He will take the bait very slowly, so slow you can barely detect the motion of the line.

Spinning tackle is ideal for carp fishing. While waiting for a bite, allow the bail of the spinning reel to remain open so the fish can take line without feeling the slightest drag. As you notice the line moving away and creeping off the reel spool, quietly close the bail. Take up slack slowly, cautiously and strike! Be ready for anything. You may have a 50 pounder who has nothing but contempt for your tiny outfit and is big enough to prove it.

Doughballs are a popular carp bait and there are hundreds of complicated recipes for making them. Oddly, carp, catfish and trout addicts have one thing in common. The trout buff has his wild fly patterns, the catfisherman his stink baits and, of course, the carp fan has his doughballs.

Among the multitude that I have seen, the easiest recipe to put together and that will catch fish is concocted as follows: Mix two cups of flour with one cup of cornmeal. Add two tablespoons of sugar (or garlic or vanilla extract). Mix with a little water and work into golf-ball size bits. Drop these into boiling water and boil until tough enough to stay on the hook. Some anglers add a shredded piece of absorbent cotton to the dough to add consistency.

Whether you catch carp for food or fun, you will know that you've been fishing. The angler who masters carp fishing can generally be counted upon to measure up to any type of angling he may encounter.

Besides anglers, bowfishermen hold carp in very high esteem. The sport of stalking and arrowing carp in the shallows is fast becoming popular from coast to coast. Of course this form of the archer's sport calls for specialized equipment in the form of special fishing arrows, line and reel, but entire outfits are reasonably available. In Virginia *it also calls for a fishing license.*

Some of my bowfishing friends tell me that carp are tricky targets at first. Due to the way the surface of the water bends the light rays, the fish isn't exactly where you think he is. The trick is to aim just beneath the fish.

If the bowfin were good to eat, it would be one of the Old Dominion's most popular fish. Perhaps you don't recognize this fish by his given name. Locally he's called grindle, but he answers to many other names when an unsuspecting angler lands one, thinking all the time that he had been fighting a bass!

Names have always been a problem with the grindle. The textbooks call him bowfin, but in each section of the country the local anglers hang another name on him. Some of these are mudfish, brindle cat, cottonfish, cypress cat and many more.

The grindle can trace his ancestry back to the Age of Reptiles, which is a considerable spell before spinning reels and monofilament lines. He's an ugly cuss with a face full of teeth and a powerful, scaled body. His eyes have that pike-like meanness that glare from behind his formidable grin. His main claim to fame is a dual breathing system that equips him for survival in the most stagnant pond. He can take oxygen from the water through his gills or rise to the surface and get a straight shot of the stuff which he carries in a lung-like bladder in his innards.

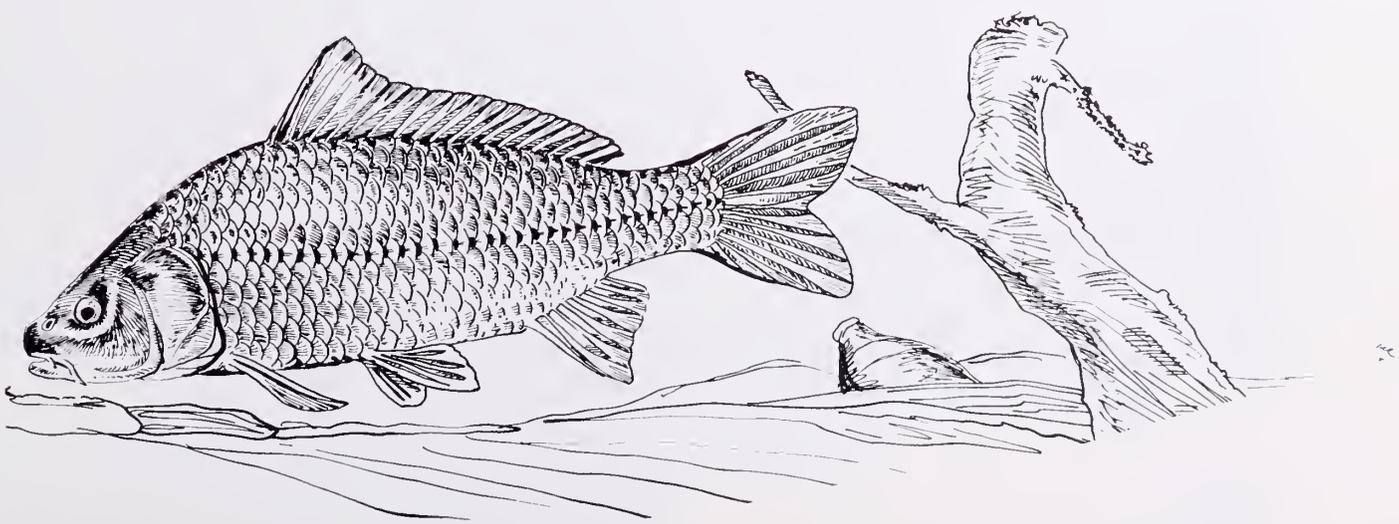
A native American, the grindle claims the eastern half of the United States as his home. He's a bit more common in the southern half of his range. From his favored hangouts in weedy shallows he attacks and devours anything he can handle. This includes artifical baits that are seldom guarded by wire leaders, therefore vulnerable to the grindle's toothsome attack.

Once a grindle puts his mind to something he's hard to persuade to do otherwise. He's been known to chase a plug right up to the boat as he strikes, time and time again until he connects. His affinity for bass baits makes him unpopular with bass fishermen, particularly when they see him steaming away with a favorite bait dangling from his jaws and the broken streamer of line following.

When it comes to roughing it up, the grindle is a master. When hooked he'll fight in the water, in the air, and when he gallops through the thick weeds, you'll swear that he's fighting you on land too. A favorite stunt is to drape your line with weeds until it snaps from the weight. Bass pull this trick too. This is why experienced bass anglers often use 15 or 20 pound test lines in weedy waters.

In the Old Dominion grindles grow to tremendous size. The largest I have defeated weighed better than 13 pounds. The biggest I have heard of topped 18. No doubt you've

(Continued on page 22)



U. S. Forest Service photo

ON Big Mary's Creek, in a beautiful little valley lying between McClung and Mine Mountains in the George Washington National Forest, is the Virginia Federation of Garden Clubs' NATURE CAMP. Through its portals pass boys and girls in grades 5 through 12 who would devote a part of their summer vacations to serious nature study. They are richly rewarded. Those who would come to camp merely for recreation are not accepted.

The purpose of the camp is threefold:

TO AROUSE THE INTEREST of young people in plants, wildlife, soil, water and their interrelationships;

TO DEVELOP CONSERVATION LEADERSHIP by offering concentrated instruction in preservation and wise use of these resources; and

TO ESTABLISH LIFELONG BONDS OF COMRADESHIP between young people with kindred interest.

The camp is for young people who are seriously interested in nature study, who have demonstrated leadership ability or potential, and who are well-rounded and socially adjusted individuals. The camp is not staffed to meet the special needs of others, and applications are carefully screened accordingly.

A resident staff conducts daily field trips and outdoor classes which provide opportunities to study wildlife, insects, wildflowers and other plants, geology, forestry, soils and astronomy. Nonresident instructors from Virginia Polytechnic Institute, U. S. Forest Service, Virginia Division of Forestry, Commission of Game and Inland Fisheries, and other agencies and institutions visit and assist with the instruction.

In order that campers may not find succeeding years' studies repetitious, a closely graded course of instruction is offered, and an opportunity for intensive study in subjects of their choice, with special hikes and field trips, is available to senior campers who have previously attended.

But it is never all work and no play, for swimming, hiking, picnics, campfires, games, music and folk dancing help round out full days of instruction and recreation. Each night's fun ends with the singing of the hymn "Now the Day Is Over"—"Lord's Prayer"—taps——lights out.

Camp fee is $70 per session plus $1 to cover medical and accident insurance. Applications must be accompanied by a deposit of $5 which is applied to the fee but which cannot be refunded once the application is accepted.

CAMPING DATES—1965

June 20—July 2	Grades 10-11-12
July 4—July 17	Grades 8-9
July 18—July 31	Grades 6-7
August 1—August 14	Grades 5-6

The grades refer to present school grades, not the grades applicants will enter next fall.

FOR APPLICATION FORMS WRITE TO

Mrs. Fred Schilling
Executive Director, NATURE CAMP
Box 148, Route 2, Afton, Virginia 22920

NATURE CAMP: Commission of Game and Inland Fisheries District Biologist Max Carpenter instructs young campers during a session devoted to wildlife conservation.

NATURE CAMP: The library, where campers study.

Nature Is Order

By KEN FRANK

(AT closing exercises of the first session of Nature Camp, 1964, more than 100 campers and visitors marched around a woodland pool, singing, each holding a lighted candle. After Ken Frank had spoken the following final inspirational words, each lighted candle was floated in silence upon the water. Campers and visitors returned to cabins and cars without speaking so much as a word, and absolute silence was maintained throughout the rest of the night; for such is the custom on the final night at Nature Camp.—Ed.)

IN our two weeks at Camp we have learned that Nature is Order. From the infinite to the infinitesimal, from planets around the sun to electrons around atomic nuclei, Nature is perfect order.

We watch our candles and see how smoothly fire consumes the wax and radiates warmth and light; how easily smoke emerges and drifts away; and we wonder at the simple order.

We gaze at our candles and remember how we found order in a stream so twisting and uncertain as Big Mary's Creek; how we lifted up a rock there and found an orderly food chain beginning with energy from the sun. We recall that the seemingly haphazard coloring on the wing of a moth is a meticulous design for camouflage; and the cheerful-sounding song of a bird, a precision territorial warning to other birds. We remember that all animals in nature are part of the order, even the mosquito and the poisonous copperhead.

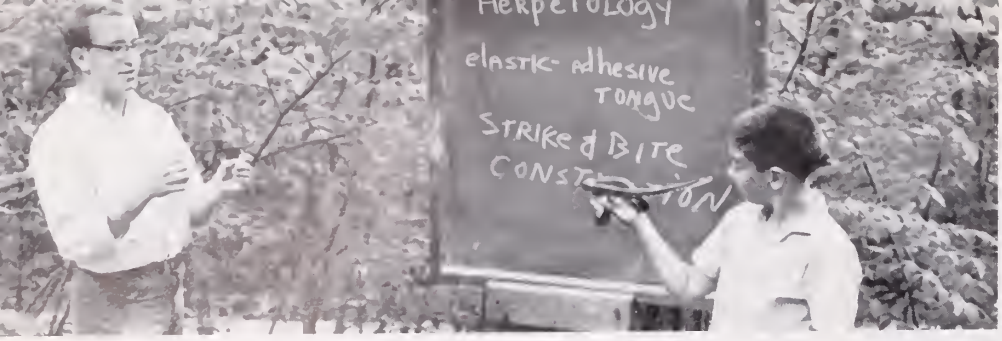
We gaze at our candles and remember that man is a part of the order and not superior to it. Quietly we have walked through the woods and felt a part of the same order which brings the song of the woodthrush and the pattern on the wing of the luna moth. We have heard our laughter, looked at our own hands, gazed at Mine Mountain, and we have found order. Perhaps for an instant we have sensed that all is exactly the way it should be.

We gaze at our candles and imagine the flame growing more intense. We remember that man is a part not only of order in Nature, but disorder. Tomorrow we shall be returning, some of us, to places where man has upset the order; where once-clear streams are polluted and once-rich fields are full of gullies and clay; we will be ashamed to see a once-soft forest floor sprinkled with rusty cans and food wrappings. In these places of broken order we are less likely to hear the song of the woodthrush or see the wing of the luna moth. Perhaps for an instant we shall feel that nothing is as it should be.

If Nature Camp has been worthwhile, it will bring anger when we recognize Nature in disorder, which is really not Nature at all. The broken bottle on the woodland path will now disturb us enough to pick it up; a friend ignorant of the ways of Nature will now annoy us enough to want to enlighten him. And when we find how man in ignorance or greed has disrupted the order of Nature, we will become not only angry, but ashamed.

Finally, we look at our candles with mixed feelings. We have learned to see and appreciate order in Nature; we have also learned to recognize disorder. As we set our candles upon the water and watch the breeze blow the flickering flames across the darkness, let us watch the simple order of these lights. Let us remember that conservation is ultimately the preservation of the order of Nature. Let our wish be that we will succeed in preserving this order. If our wish prevails, the candle of knowledge kindled two weeks past shall live forever.

NATURE CAMP: Where campers worship (left), and where they play (below).
Soil Conservation Service photo by Hypes



NATURE CAMP: Young camper and blacksnake examine each other intently during session on reptiles.

Billy Needs Your Help

By CAROL F. CARGILL
Raleigh, North Carolina

WHEN our son, Billy, was seven years old, my husband and I managed to send him to a summer camp. Up until then he seemed like a normal seven-year-old child; but when Billy returned, my husband and I recognized a big change in our son. I honestly believe that it was then I started getting my gray hairs.

It was Saturday afternoon, Billy had been home for exactly two days, and I had just cleaned his room and started on the living room when I heard "It" sneak in the back door. After giving him about ten minutes of quietness, and knowing that he was up to something, I decided to investigate. Tiptoeing down the hall to his room, I casually opened the door. Billy was sitting in the middle of his bed playing with a "sweet little" snake about ten inches long!

From then on, Billy began bringing strange bits of "wildlife" into the house. He started helping his father at the barn, and took a general interest in our small farm. On cold nights he might bring in anything from his pet calf to the chickens, so "they wouldn't get cold."

That one summer at camp in the mountains, Billy was taught the beauty, vital needs and appreciation of wildlife. Instructors took the youngsters on hikes through the woods pointing out the different plants, trees, animals and handiwork of nature.

As Billy grew older, his father taught him to hunt, and fish, and tend the soil. He took summer jobs teaching wildlife at camps and sharing his interest in nature. He realized the disaster that was overtaking the resources of our nation and our own farm. The streams did not have the quantity or quality of fish they once had; the birds that once stopped to "visit" on their trip south no longer came our way. The rabbits, squirrels, and quail in nearby forests and fields were becoming a rare sight. Our woodlands were being burned and it seemed that more barren fields were being added to our community each year.

Bill is one of the more fortunate youngsters in the state; he had the opportunity to learn about wildlife and nature. Thanks to a lot of Billys in this state, Virginia today is green, and has a bountiful supply of wildlife. Virginia has wildlife management areas, fish hatcheries, dedicated fish and game technicians and a fine force of game wardens on the job keeping hunting and fishing a sporting and rewarding pastime.

Many citizens are unaware of the importance of bringing up a child with a knowledge of and respect for God's creations. The child that respects nature will very likely show more respect for his surroundings and fellowman. The present generation is trying to do the best it can now to protect the forests, swamps, and their inhabitants. But this generation will soon pass on; then what will nature's course be? Will it all eventually end and be replaced by superhighways, supermarkets, housing developments and drainage projects?

If we, the present generation, teach our children the attitude of responsibility toward nature, we can be assured that later generations will be richer for it.

Many of our swamps are now being drained or filled in. What happens to their inhabitants?

Many of our streams and rivers are being polluted by deadly waste materials that can destroy thousands of fish in a matter of hours.

Forests still are burned through carelessness and vandalism. Squirrels, rabbits, deer, and other wildlife are made homeless.

Many high schools offer from one to four years of vocational agriculture for boys. This course ordinarily centers around farming the land and raising the farm animals, but it needs to be, and often is, expanded to cover conservation of the natural resources and particularly the wildlife associated with the farm.

Virginia Polytechnic Institute offers excellent courses in forestry, wildlife management, agriculture, and other branches of natural resource management. Many students that complete these courses go into a field of work in which they can apply their knowledge.

The employees of government agencies cannot fight alone for the preservation of our resources. We must have the help of every camper, hunter, fisherman, farmer and citizen of the state to preserve Virginia's natural resources. We must also have the help of every parent, to teach our children the value of our resources and prepare them to carry on with our work.

The Virginia Commission of Game and Inland Fisheries has free booklets and pamphlets that are helpful in developing, in young and old alike, an attitude of the importance of preserving and caring for our wildlife and other natural resources.

Billy, like so many other youngsters, learned of wildlife while still in school. Now he is associated with wildlife in his chosen career.

Why not try your hand at giving today's youth the same opportunity? It can be fun, and educational; and you will be helping Billy, and others like him, to give nature a helping hand.

NATURE CAMP: On daily field trips campers study wildlife, insects, wildflowers and other plants, geology, forestry and soils.

JUS' RAMBLIN'

By DOROTHY E. ALLEN
Education Officer

Commission photo by Kesteloo

OUR prehistoric survivor, the opossum, is North America's only remaining mammal that carries its young in a pouch like his cousin the kangaroo. Eons ago he trudged along behind great dinosaurs. Today he still ambles around at a leisurely pace, seemingly calm and never excited. At the sound of a footstep he can flop on his back and play dead with an ability that defies even a biologist to know he's alive.

Hollow logs and brush piles provide him natural shelter. A favorite den site is an old woodchuck burrow. The opossum collects materials for his bed by grasping a bunch of leaves in his mouth then passing them back under his body into his coiled tail to transport them.

Marsupials have a very interesting birth process. Six to eighteen kidney bean size young are born in an embryonic stage and maneuver themselves through the mother's coarse, scraggy hair to the lengthwise opening in her pocket. Here each immediately makes fast to one of the mother's thirteen teats. As soon as the baby's mouth is in place the teat swells in such a manner that the baby cannot remove itself for about sixty days.

Brown in color and about the size of mice, the young finally climb out of the mother's baby carriage to see the outside world. For another month the "passel o 'possums" stay with their mother and she carries them everywhere she goes. Her long prehensile tail is held rigid and arched over her back as a handrail. The babies hang on for dear life as they ride "piggy back," for many creatures such as the great horned owl, the fox and the bobcat are waiting to get their hides. Two litters are born a year—in January or February and again in May or June. The spring babies become adults by fall weighing four to seven pounds. They are among the homeliest of wild animals. The opossum's legs are so short he seems to be dragging his body along the ground by his pink feet. He has a sharp-snouted white face with pink ears and nose, and when he snarls he shows fifty teeth—more than any other native mammal. His brain cap hardly has room for a brain, and his round-button eyes aren't too good.

The opossum takes it easy in his hunt for food and eats whatever he comes across. His foods may consist of anything from persimmons (a favorite) to apples, peaches, mice, earthworms, insects, leaves, roots, eggs and even carrion.

The rascal can climb a tree to the baying of hounds, and as it often turns out he becomes a steaming platterful of nicely textured white meat. Virginia 'possum and sweet 'taters was at one time considered quite a delicacy.

The opossum is considered a stupid little creature, but he walked the face of the earth long before man appeared and may be around long after man has raced and ranted his way to extinction. In sticking to his relaxed way of life he is probably pretty smart after all.

It's "all aboard" as young 'possums hang on for dear life and mother goes a-ramblin' in search of a next meal for the hungry family.

U. S. Fish and Wildlife Service photo

Young Birds Are Fun To Watch

By ILEEN BROWN
South Boston

U. S. Soil Conservation Service photo

NOTHING offers more pleasure to the bird watcher than the antics of the baby bird. With a vacant lot overrun with cedars, walnut and apple trees and plenty of ground cover adjoining our lot, coupled with a wren house we put in the maple tree, we felt we had plenty of desirable nesting areas to attract birds. Yet it is a little difficult to get a close-up of the young birds from such a distance. Therefore, I decided to put my bird feeding on a year-round basis, hoping the young birds would be brought to the feeder for a handout. I wasn't disappointed.

In April a wren took possession of the bird house in the maple tree. When the eggs hatched and the birds were ready to be fed, the mother and father bird were a relay team flying between the bird house and the feeder. When the birds were old enough to leave the nest, they were coaxed out by a parent bird holding a morsel of food just beyond the baby birds' reach. As each bird reached for the food he fell out of the nest. They flew to my next-door neighbor's fence and there, lined up like Monday's wash, were coaxed to try their wings.

The robins that built in a nearby tree didn't fare as well. When the birds were within a few days of leaving the nest a stray cat upset the nest and killed one bird. The other bird fell to the ground, where we rescued him. A young bird presents quite a problem. If at all possible, the bird is better off if he is put in a safe place near where he is found. Usually the mother bird will come looking for him. With this thought in mind, a makeshift nest was made in a nearby hedge and the bird placed in it. A few days later a baby robin was seen in the yard, so we believe he survived.

We put a bird house about fifteen feet up in a cedar tree hoping a flicker would like it well enough to build in it. For the house we used a hollow log about two feet long, and large enough to provide a floor space of seven to eight inches. We nailed on a floor and a top. A 2½-inch entrance hole was drilled about 11 inches from the floor. We also provided for good drainage. The first day the house was up a starling inspected it, liked it, and took over.

I often think starlings must be the cleanest birds alive the way they take over the bird bath. Recently I noticed a mother starling coaxing a fledgling into the water by pecking and nudging him. Once in the water the fledgling was reluctant to leave. While the starling was enjoying the bird bath, a towee was on the ground enjoying a shower as the water splashed over the rim and fell to the ground.

In May a flock of goldfinches created quite a stir when they flew to the hedgetree, looked around, and then flew over to the bridal wreath hedge. There, perched like yellow butterflies on the weeping branches, they ate their fill from the fading blooms. They made regular visits while the blooms lasted. When the bridal wreath offered nothing more in the way of food, they disappeared. It wasn't until the red-hot pokers in the flower border began to seed out in June that they returned. Apparently they didn't care for the bread crumbs or the scratch grain I was putting in the feeder. Occasionally they would drink from the bird bath.

In late summer the sunflowers began to seed out and they returned in numbers. Also they seemed to find choice tidbits in the apple tree, and it was here in late September that I saw the first young goldfinch of the season being fed by a parent bird.

The wren house in the maple tree was inhabited a second time by early June. Also by this time young blue jays, starlings, catbirds, thrashers, mockingbirds, cardinals, sparrows and downy woodpeckers were paying regular visits to the yard.

The mother birds seemed to prefer bringing their young to the back steps where I put out bread crumbs and grain, rather than using the platform feeder about twenty feet away. This was a happy arrangement for me as well. With only the screen door and a few feet of space separating me from them, I could enjoy them close up while I had my breakfast. A blue jay and a song sparrow, each with a crippled foot, paid visits each morning for awhile and then stopped coming. Even a flicker ventured up on the steps one morning.

In July I had quite a treat when a quail came through the flower border and into the yard. Midway the yard he stopped to call "bobwhite." A few days later he was joined by a companion. After this I started putting a handful of grain at the edge of the flower border hoping there were young birds about. But if there were, I didn't see them.

While working in the flower border I noticed a mother and baby thrasher in the apple tree. The baby thrasher was raising quite a ruckus. When the mother thrasher saw me, she flew over to the baby bird and pecked him gently. Immediately the baby bird was silent. They stayed on the limb while I was in the garden, but I didn't hear another peep from the young bird.

The day the dove season opened this year I saw my first dove in the yard. He joined the other birds at the feeder, eating the grain that fell to the ground. He also drank from the bird bath, completely ignoring the pet cocker spaniel that was sunning in the yard. Periodically, the dove returns and eats the grain that I now scatter on the ground near the feeder. I'm hoping next year I will have young doves in the yard.

Bird watching is a sure cure for boredom but a little hard on the non bird watchers in the family. It takes some adjusting to being awakened in the early morning or called from your bath to see a strange bird feeding in the yard.

VIRGINIA WILDLIFE

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CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

SALT INTRODUCTION IN BACK BAY PLANNED. A project allowing the controlled introduction of salt water into Back Bay is hopefully scheduled to go into operation in April, according to R. O. Halstead, Game Warden Supervisor for the Game Commission's Hampton Roads District. The salt water introduction is to be accomplished by means of a 36 inch pumping station being built by the city of Virginia Beach to lift water from the Atlantic and discharge it into the bay.

A cooperative 6 year biological investigation by the Virginia and North Carolina Game Commissions and the U.S. Fish and Wildlife Service indicated conclusively that 10 to 15 percent salinity in the bay acted as a great stimulant to aquatic plant growth, especially those plants desirable as waterfowl foods. The main benefit of the salt is in the accelerated settling of silt with the resultant clear waters allowing better penetration of sunlight and consequent accelerated plant growth.

The pumping station will be situated on a pier similar to Virginia Beach fishing piers at the Little Island Coast Guard Station below Sandbridge. The pump will lift some 22,000 gallons of salt water per minute vertically from the ocean at the pier's terminal end and deliver it to Back Bay by gravity flow through a 36 inch pipe. The water will enter the bay in the vicinity of Shipps Bay and North Bay, the same point at which ocean water entered during the Ash Wednesday storm in 1962.

If sufficient water can be introduced by this means and if adequate mixing occurs, waterfowl foods could show marked improvement by this fall's gunning season. Salinity levels all over the bay will be constantly monitored by biologists from Virginia, North Carolina, and the U.S. Fish and Wildlife Service, and the salt water introduction will be regulated accordingly for maximum benefit.

DUCK COUNT DISCOURAGING BUT NOT DECISIVE. The 1965 mid-winter waterfowl count for the Atlantic Flyway showed puddle duck numbers down 22% and diving ducks down 17%, but the situation may not be as bad as this would indicate according to Fish and Wildlife Service officials. High water and flooding conditions existed over most of the waterfowl wintering area from January 4 through 10 when the survey was taken allowing puddle ducks to spread out into flooded timber and backwaters where they are difficult to observe.

Diving ducks also were found to be normally distributed during the survey period this year. Hundreds of thousands of scaup and scoters were seen off the coast of South Carolina, but were not included in the count since the survey area does not include ocean waters. Thus Fish and Wildlife Service personnel do not believe that the pessimistic statistics from this year's count accurately represent the Flyway waterfowl population at this time.

Canada geese showed only a slight decrease (—8%) and are still 11% above the 10 year population average. Snow geese numbers dropped 22% but numbers are only 7% below the 10 year average for the species. Probably due to milder weather, several thousand snow geese were recorded in the New Jersey-Delaware area where none were seen last year. Swans also showed a 13% drop in numbers, but populations are still 10% above average.

RARELY

Photo by Leonard Lee Rue III

Wildlife babies deserve the chance to grow up in freedom in their native woodlands. It's dangerous even to approach bear cubs. No matter how good your intentions, mother bear will not understand.

SPRING brings new life to an old world as many wild creatures bear young at this time of year. Discovering a fawn, a tiny raccoon or a cub bear when taking a walk in the country thrills the finder and kindles a spark of kindness toward all living things.

One falls in love with the adorable woodland baby—this poor, helpless orphan, lost and alone. Engulfed with these emotional feelings for the little "waif," most of us find it hard to resist the temptation to do a good deed by rescuing the youngster and taking it home. This "good deed' is really an unkindness, for the wild one is not lost, the woodland is its home, and capture no matter how gently accomplished is the most terrifying experience of all. Often the mother is near, hiding, looking for food, or just waiting for you to go away. She has hidden her young, in its nature-given camouflaged coat, and she may not approach now because of her natural fear of humans. This is particularly true of deer. But if you come upon little roly-poly black bear cubs, though you be enamored by their intriguing antics, it is best not to linger; for if the mother bear is near, she will attack out of fear that her babies may be molested.

If the privacy of a raccoon tree den nursery concealing halloween-masked babies is invaded, the mother may return and carry her offspring by the nap of the neck to a new abode if the intruder will but leave them to her care. But she will not abandon them.

Cuddlesome baby bunnies you can cup in one hand will huddle and freeze like statues if you come near. It is you they fear—not being left alone in the thicket or hedgerow that is their home.

Boys and girls who go tramping through the woods may discover many forms of wildlife and attempt to carry them home, but they rarely make satisfactory pets. Most wild creatures will perish if adopted. A change of diet, disease,

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Commission photo by Kesteloo

WAIFS

By DOROTHY E. ALLEN
Education Officer

and you will not improve their lot at all by trying to adopt them. The fawn, the cot-d are all protected from capture by law, and while the fox cub may be cute he very satisfactory pet. It's best to stick to puppies, canaries and goldfish!

Photos by Leonard Lee Rue III

and neglect often are fatal to captive wild animals.

The wild babies' place and natural home is right where you find them. Each living creature has a special niche to fill and part to play in the scheme of nature. Wildlife has the power to produce far more young than can survive. The weak die, while the strong survive and multiply. But each has a far better chance of survival if left in its native habitat, and each deserves the chance to live free and face death, when it comes, in familiar surroundings it knows as home.

It is the policy of the Commission of Game and Inland Fisheries not to allow any game bird or game animal to be held in captivity without proper authorization. Song birds are protected by law against capture as well as killing.

In rare cases wildlife babies not able to fend for themselves may be taken under circumstances where it is obvious that the parents are dead. These waifs are the property of the State of Virginia and are to be turned over to the local game warden where they are taken. Some can be raised in natural surroundings at the State game farm. They are seldom left to an individual, for when the "wild" pet reaches maturity and can no longer be petted, the problem of humane disposal arises. Once tame, very few are able to revert to the wild state successfully.

Every year the Game Commission receives requests for permits to keep woodland "waifs." Most of these wild babies will be killed by the "good deed" that attempts to give them the care they do not need. And if a "tame" wild creature does survive—LOOK OUT! Every year newspapers carry accounts of a pet deer or a cub bear going berserk or seriously injuring its "benefactor." Executive Director Chester Phelps says, "Game animals held as pets only bring complications regarding feeding, holding facilities, training, the possibility of physical injury, and leave nothing to benefit either the animal or person involved."

So really be kind, stay within the law, and leave the wild woodland babies alone—they are rarely waifs. Enjoy wildlife, but enjoy it in its natural environment.

ACCESS ALONG THE SHENANDOAH

Commission photo by Kesteloo

By HARRY L. GILLAM
Information Officer

FED by mountain trout streams arising in the Alleghenies on the west, in the Massanutten mountain area between the two forks, and along the Blue Ridge in the Shenandoah National Park on the east, the Shenandoah's clear, cool waters are famous for scrappy smallmouth bass. One of the favorite methods of angling is drifting in a canoe or flat-bottomed scow, whose shallow draft and easy maneuverability make them ideal in the strong currents and shallow riffles. For this type of fishing, conveniently spaced put-in and take-out points are a necessity.

The Shenandoah River system, especially the main river, is highly commercialized, and access is difficult due to the extensive private holdings. Thus the Commission of Game and Inland Fisheries has carried out an extensive access area development program in this section.

In sharp contrast to tidewater areas, the Shenandoah River is too shallow and too swift for boating, so access points are almost exclusively for fishermen. Because of the light boats involved and the limited use received, these areas consist of a graveled ramp and graveled parking area for 5 to 10 cars. Some of the sites include up to three acres of land, so there is frequently overflow parking space in ungraveled areas.

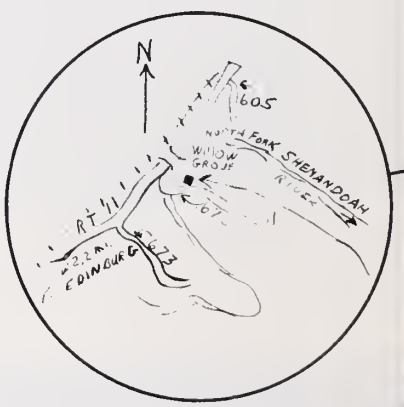
There are currently 12 access points on the Shenandoah system. Seven of these are on the popular South Fork, four on the main stream, and one on the North Fork. As on the other similar float fishing streams in the state, the Commission ultimately hopes to have an access point about every 10 miles, an average day's float trip, on all suitable stretches of the Shenandoah River system.

The graveled ramp at Riverton Access area, typical of those developed for fisherman access by the Game Commission.

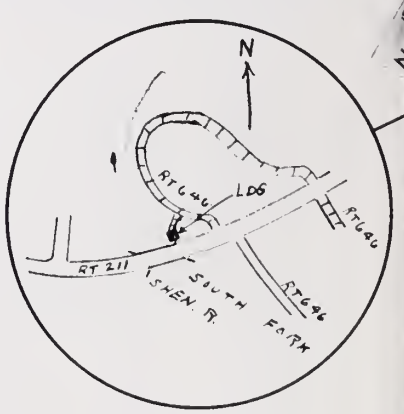
RIVERTON LANDING—Located on the west bank of the North Fork just above its confluence with the South Fork of Rt. 340 north of Riverton, this area with its graveled parking lot and ramp is reacied via Rt. 637.

KARO LANDING—Located 5 miles south of Front Royal on the east bank of the South Fork near the entrance of Gooney Run, this site is reached from Rt. 340 at the Gooney Run bridge and features a graveled ramp and large parking area.

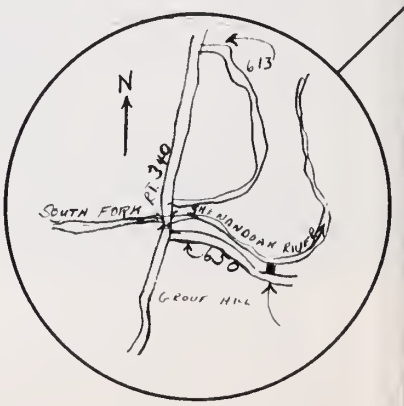
CHAPMAN LANDING—Located near the community of Willow Grove, this area with its graveled parking lot and ramp is reached via Rt. 672 leading east from Rt. 211 some 2.2 miles north of Edinburg. It is on the west bank of the North Fork, the only put-in point on this tributary.

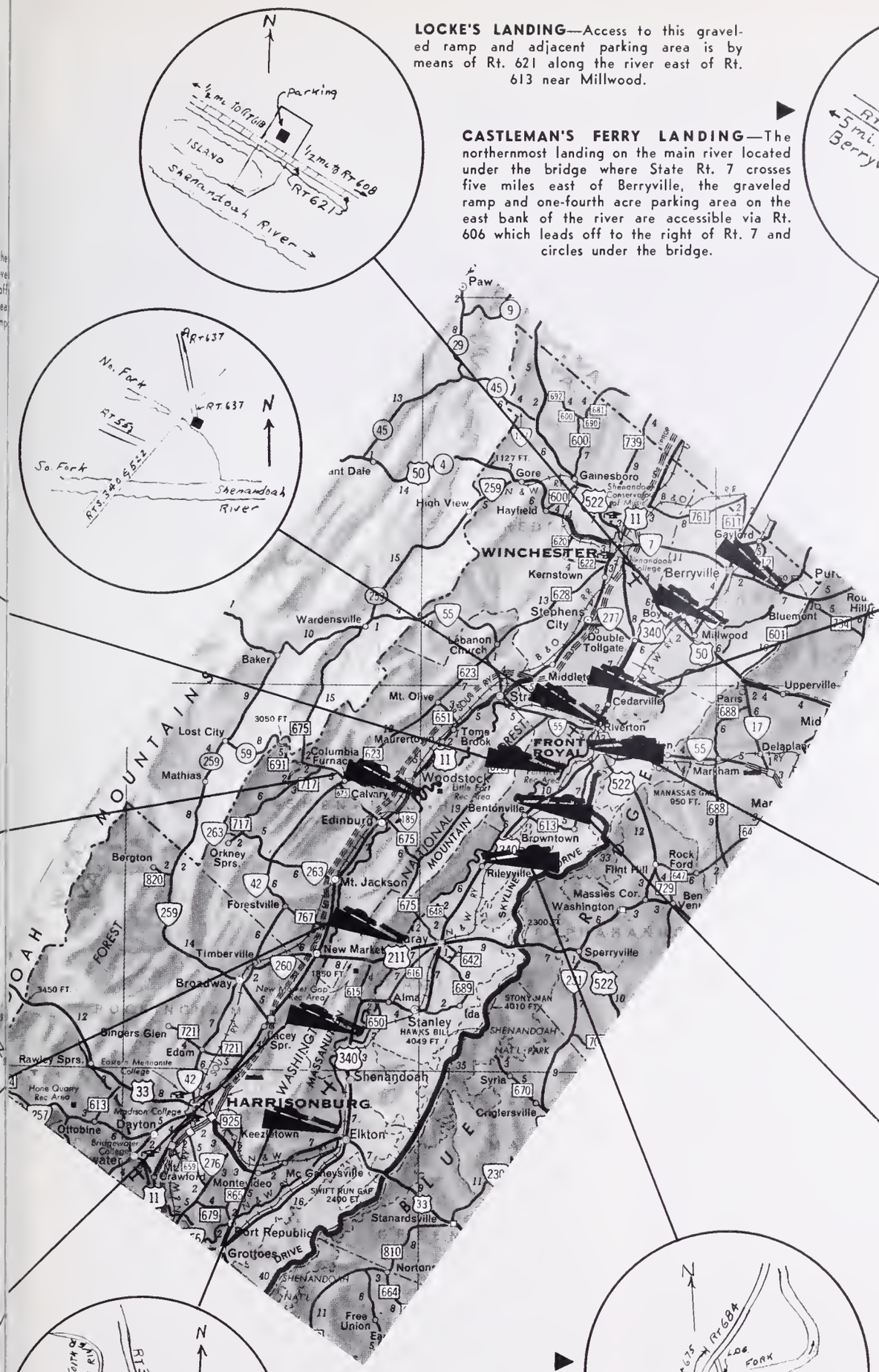


WHITE HOUSE LANDING—Located under White House bridge on Rt. 211 just west of Luray, this site is accessible via Rt. 646 to the north of Rt. 211. Rt. 646 makes a loop and again crosses Rt. 211 which could cause confusion in reaching the site.



GROVE HILL LANDING—Located 1¼ miles east of Rt 340, this 1¼ acre site with its graveled ramp on the east bank of the South Fork is accessible via Rt. 650 with parking space on both sides of the road.

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Bentonville
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Washington
Sperryville
Flint Hill
Rock Ford
Mt. Jackson
New Market
Timberville
Broadway
Forestville
Edinburg
Mt. Olive
Maurertown
Toms Brook
Columbia Furnace
Lost City
Mathias
Calvary
Orkney Sprs.
Bergton
Singers Glen
Edom
Rawley Sprs.
Dayton
Ottobine
Keezletown
Mt. Crawford
Montevideo
Mc Gaheysville
Port Republic
Grottoes
Stanardsville
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Ida
Stony Man
Hawks Bill
Shenandoah Nat'l Park
Swift Run Gap
Massanutten Mountain
Shenandoah Mountain
Blue Ridge
Skyline Drive
Forest
Wardensville
Baker
Lebanon Church
Stephens City
Kernstown
Double Tollgate
Millwood
Bluemont
Upperville
Paris
Delaplane
Gaylord
Hayfield
High View
Mt. Dale
Hollow
Lacey Spring
Harrisonburg
Shenandoah River
Front Royal
Berryville
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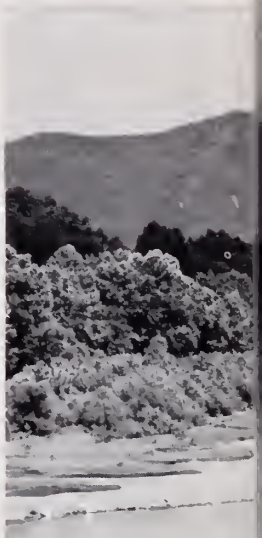
WADING



By RONALD SHORTRIDGE
Arlington

THE trip had been planned for over a year before we got the opportunity to make a float-fishing trip down the South Fork of the Shenandoah in August. Fred Curry of Alexandria and myself had originated the idea in December 1962 and had planned the float trip the summer of 1963. But for one reason or another the trip never came about. In July 1964 the idea was reborn with two more fellows joining us, Wayne Brandenberg of Alexandria and Dave Magetteii of Arlington. Topographical maps were studied and it was decided to float from a point about two miles up river from Bentonville Landing down river to Front Royal, a distance we calculated to be about twenty miles as the river flows. None of us had ever fished the Shenandoah, but Fred had driven to Front Royal a few days before and looked at the river from the route 55 bridge and reported it to look in fine condition.

We had one aluminum eight-footer and two rubber two-man boats which we figured to be ideal for the trip. Our plan called for two cars—one to be left at Front Royal to be picked up on Sunday, and the other to carry us to the port of entry near Bentonville. The gear was packed the night before and we left my home in Arlington at 3:30 a.m. August 15th, joined Brandenberg in Fairfax, then eagerly set sail for Front Royal.

We met our first difficulty in Front Royal. Our plan called for leaving Brandy's car at an all-night service station in Front Royal. Upon inquiring we found that we must have the permission of the station owner in order to leave the car until Sunday, and he would not be in before seven; so we whiled away the hour or so in a nearby restaurant over cups of black coffee and fumed because we would now hit the river so late. I began to vision big bass feeding in deep pools in the river while we sat idle but the time passed rather quickly, permission was granted and we were once again on our way.

It was 7:30 when we parked at the river's edge and started dragging out gear. A few minutes later we hit our second piece of trouble. Upon inflating one of the rubber boats we found that it had a hole in it. A quick drive to a service station for a cold patch fixed that, and back at the river we used a hand pump to inflate it again. But then we discovered a second hole in the same boat, so another trip was made to the service station for another patch and the hand pumping had to be done for the third time. It was 8:30 before we had the gear strapped into one rubber boat, which we tied to the aluminum. We piled ourselves into the other two craft and embarked upon our adventure. Brandy and myself were in the second rubber boat; Fred and Dave in the aluminum. We hadn't gone far before we encountered our first of many rapids. With a lot of shoving from inside the boat and a whole lot of scraping under it our rubber boat somehow made it across the rocks and into very nice water. But as we expected, the aluminum boat would not float across on its own, and Dave and Fred had to carry both boats across. We had not anticipated the river to be in such a low-water condition, which I guess was a direct result of bad planning. We had not considered the time of year, when most rivers are low. Then, too, the drought had added to the problem. Brandy and I floated ahead of Dave and Fred while they struggled across the low water, and as we hit deeper water Brandy and I immediately tied on spinners and began working the pools. By the time Fred and Dave caught us we had boated five small bass.

The four of us began working a wide, deep pool and I hung onto a channel cat that went about four pounds. He hit a Mepp and gave me quite a tussle before Brandy hefted him into the rubber boat. We drifted to another deep channel and Brandy tied onto a bass for a very brief fight. The fish raced upstream a few yards, jumped and spit the hook at us. I was the only one that got a good look at him and I would guess it would have gone 18 to 20 inches. Brandy was ready to be carted away, but that nice fish early in the trip gave all of us renewed spirit and we headed downstream casting for his equal. A few minutes later a six-pound channel cat hit Dave's silver spoon, and the fight was on. Dave held on and Fred netted the big fish, and our eagerness mounted.

We encountered numerous low water stretches and each time the aluminum boat had to be carried across. The rubber boats went across some, but most of the time we had to get out and wade, pulling boats. But the deeper channels seemed abundant with small bass, and Brandy and I boated our share while Fred and Dave continued to struggle with their boat. The situation was so bad that by 4:30 that afternoon we had floated only four and one half miles. We naturally became alarmed since it was evident that we would not reach our destination of Front Royal by Sunday afternoon if we kept this turtle's pace. Then disaster again struck as the rubber boat we were riding sprung another leak due to the rough treatment it was receiving on the sharp rocks. We pulled onto the bank and decided to make a decision. The issue was met with indecision, as there was a suggestion that we dispense with fishing and concentrate on

THE SHENANDOAH

ON A WEEKEND FLOAT TRIP

reaching Front Royal by late Sunday afternoon. Another suggestion was that we carry all the gear and walk the bank down river until dark and possibly pick up another five miles, which was quickly turned down. It finally was decided that since we were close to the car we had left at Bentonville we should camp where we were and fish until dark, then walk back to the car, bring it to camp, and just fish the vicinity Sunday. We would leave Sunday afternoon, drive back to Front Royal and pick up the other car. So we got permission from the landowner to make camp on the river's edge.

When we unpacked the "cargo" boat we found that much of our gear was wet. We figured that while going through the rough water some of it had splashed into the boat. Blankets and extra clothing we had taken along were damp and some of the food was wet.

We were all starved, so a fire was quickly made and supper started. With our stomachs full of hot food and a few cups of the strongest coffee in the East, we were again full of vigor and raring to go. But Fred and Brandy decided to walk back and get the car at Bentonville Landing. They then went to Front Royal and got the second car and were back at camp by ten o'clock. Dave and I stayed in camp, hung out the wet blankets and clothes to dry, and set up the sleeping cots. We sat around camp that night sipping more strong coffee and taking in the fresh mountain air. Suddenly the whole trip seemed worthwhile. But we soon hit the beds and six o'clock came early.

We decided to put all the equipment and the leaky rubber boat in the cars and fish near our camp. This time Fred and Dave decided Brandy and I should worry with the aluminum boat, which seemed only fair since we caught most of the fish the previous day while Dave and Fred fought the low water with the heavy aluminum boat.

We hit the river and it looked like it would be a wonderful day. But as Fred and Dave paddled out into the river they noticed a hole in the rubber boat. By the time they got back to the bank it was full of water. This was the boat that had carried our gear and we now understood how the gear got wet. They drove back to the service station for a patch while Brandy and I caught a few crickets and carried the aluminum boat a half mile up river and put in for some pleasant fishing. We kept spinners tied on and as we passed a large pool we hung onto three bass. One was of fair size, but I played him too long and he threw the hook. It was maybe fourteen inches.

Poor Fred and Dave finally got back to the river and set out to do some fishing, but after nearly thirty minutes a strong wind came up and black clouds appeared overhead, threatening rain. We headed for the cars and it was raining in another hour. We said farewell to the ol' Shenandoah and returned home. We had caught 25 bass and 4 catfish despite our troubles, though only two catfish were of any size. You can bet that if we plan another float trip we will give much consideration to the hard-learned lessons from this trip.

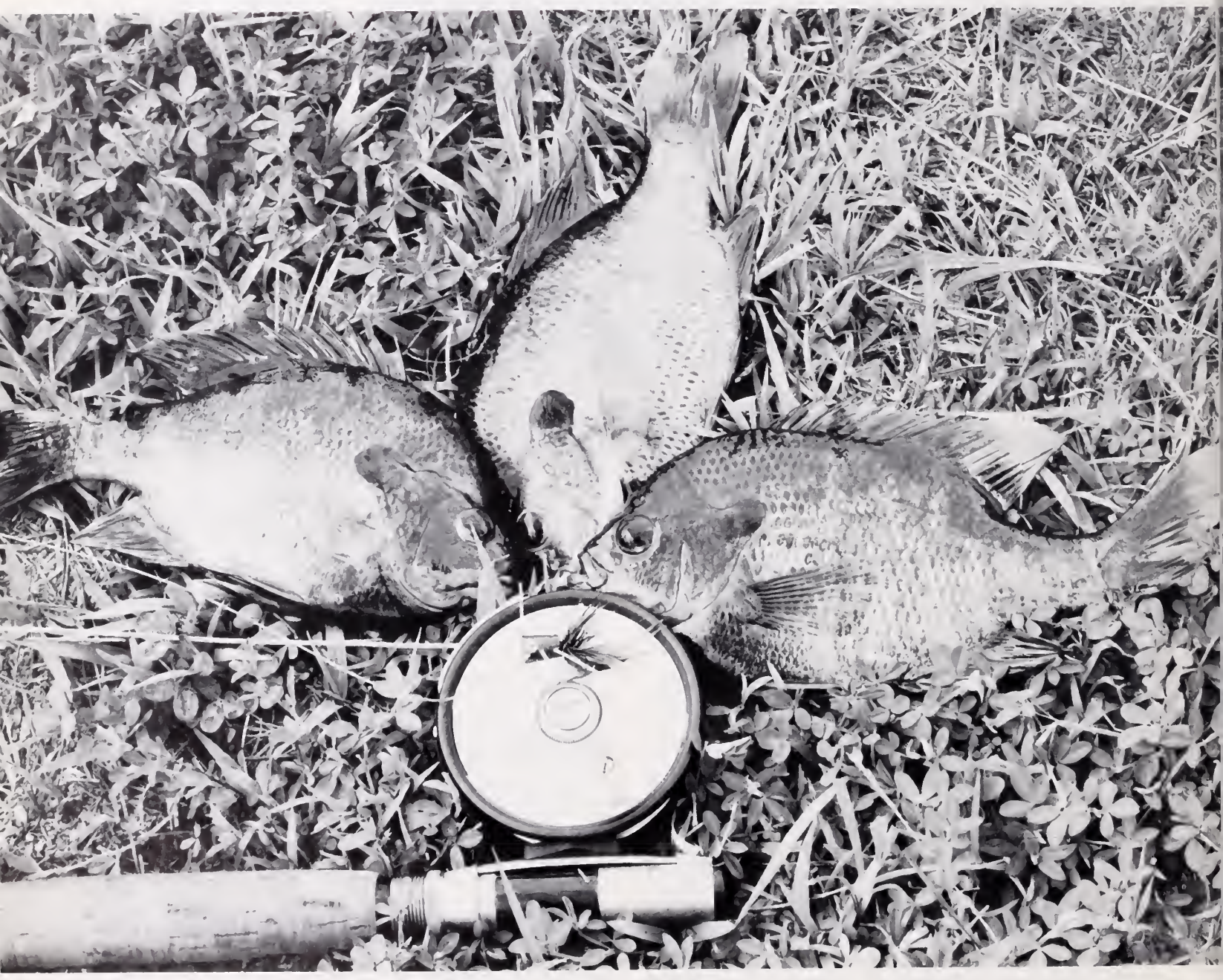
Fresh-Water Bantamweight

By LEO A. AUBREY
Fort Lee

WHEN the bass are off their feed and the pickerel are sulking, there's one member of the finny population that will usually co-operate so that the day will not be a complete failure—the smaller members of the sunfish family such as bluegills, redbreast sunfish and the pumpkinseeds. These little scrappers always seem to be in a willing mood to hit almost any bait or lure that is presented to them. I've caught them in weather so hot that I had to quit fishing even though they were on a feeding spree, and in weather so cold that even with thermal underwear and plenty of warm clothes I couldn't take it and had to leave.

Spawning time—usually May or June—is the best time to get a stringer full of sunfish and this is also when the bigger specimens are caught. At this time—when they are

Commission photo by Kesteloo



on the beds—small popping bugs seem to work best of all, especially bugs in a red and white or yellow and white finish. Sunfish will also hit small red worms and crickets if they are cast directly into the beds. Sunfish will sometimes hit artificial worms, but as a rule I've not found them to be very productive. Sunfish have been known to strike at plugs almost as big as they were and they will also hit minnows. I have caught many of them while still fishing for crappie and yellow perch. When a large sunfish takes a minnow it doesn't play around; the bobber doesn't jiggle but goes straight down, and when you set the hook you'll probably think that a large bass has taken the bait.

Fishing for sunfish can be done with almost any type of tackle from a hand line to the finest of equipment, depending on personal preference. I like to use a fly rod for these little gamesters in the spring and early summer, and a spinning rod in very hot or very cold weather when they are usually in deep waters. As mentioned before popping bugs are fine lures but sunfish aren't choosy, and almost any small wet or dry fly pattern will take fish. Another good lure is a small rubber spider. If the fish refuse to take artificials, as sometimes happens, then try a small red worm on a number ten or twelve hook. If a bobber is used, put on a very small one such as a quill bobber, which offers very little if any resistance when the fish takes the bait. Many fishermen fail to get as many sunfish as they should because of using too big a hook and too large a bobber. Remember that the sunfishes have small mouths and also that the resistance that the bobber offers will make the fish, especially the larger fishes, suspicious.

The best spot for sunfishes? Well, usually the nearest lake, pond or river. Small ponds and farm ponds are usually very productive except in those bodies of water where the anglers have concentrated most of their efforts on the larger fishes such as bass and chain pickerel. The removal of these predator fishes—nature's rein—almost always results in a population explosion of the sunfishes. There is insufficient living room and/or food, and they do not grow normally but remain stunted.

My favorite spot for these little fighters is a small pond that is just a few miles from Richmond. This little pond of about twenty acres is located in Pocahontas State Park and seems to have been made to order for sunfish. Lily pads and vegetation cover a large part of this water with small openings strategically spaced about, just large enough to cast a fly or popping bug in. The water is a dark color, perhaps because of all the vegetation, and the sunfishes are also dark. Most of the sunfishes in this pond are good sized, running in some cases up to a half pound or better. There are a large number of chain pickerel in this pond, and this may be the reason that these sunfishes are, on the average, larger than those usually found in a small body of water. Fly fishing is something of a problem here as the shores are heavily wooded and there are very few open spots from which to cast. For this reason I fish here with a light canvas boat which is easily carried. There is a parking space located by the nature museum, and it's only about two hundred yards or so to the water.

These spunky little fishes remind me of a small bantam rooster that my grandmother once had. It would tackle anything from a larger rooster to a dog, and these small fishes have the same kind of fighting spirit. They truly deserve the name of "Fresh-Water Bantamweight."

The Strange American

By KEN MORRISON

OUR national penchant for fastidiousness and conformity has produced this definition of the Strange American—strange because his attitudes and actions are not generally accepted:

1. He declines to cut down a dead tree because he sees grace and pattern in its sharp silhouette; he knows that woodpeckers and bluebirds may nest in it, and hawks may alight in its top branches.

2. He does not burn over his land each spring and fall in order to "neaten up" the place. To him the brown grasses, the wild flowers, the seeding trees, are preferable to a charred, albeit neat, wasteland.

3. He leaves some brush piles. Instead of burning all accumulated branches, grass, etc., he puts at least some of it in piles which he knows will be attractive to brown thrashers, wrens and towhees, as well as rabbits, squirrels, chipmunks, raccoons and other wildlife.

4. He doesn't cut all the underbrush in sight on the theory that it harbors snakes and other so-called "dangerous" critters. Rather, he enjoys observing nature's plant succession and how, miraculously, the wildlife community changes as the vegetation matures.

5. He doesn't drench his land with poison sprays. At the sight of an insect on a favorite shrub, the Strange American doesn't rush for a bottle marked "poison" and spray it on all vegetation within reach. He may do some careful selective spraying now and then to control an insect outbreak, but he knows that blanket spraying will eliminate insects that are helpful as well as those doing the damage. Equally convincing is his awareness that poison broadcast upon the landscape will silence many bird songs and change the ecology of his small part of the earth in myriad ways that are as yet little understood.

6. He respects swamps and marshes. He knows that these water reservoirs are important in nature's scheme of things, serving to hold flood waters and maintain the water table. He has discovered that more wildlife finds refuge in his marsh than in any comparable area of his stewardship.

7. He doesn't try to mold the wild community to his own design. His conviction, developed through long and sympathetic observation of nature, is that the web of life is not an accident, so he does not yield to the temptation to judge the creatures of the wild by human moral standards. Instead he observes and enjoys all the wildlife with which he shares the land, sensing that each kind has its part in nature's massive pageant.

In short, the Strange American lives in harmony with the land. For our own sake, let's hope that some day the man who abuses and wars upon the land will be the Strange American, instead of the man who lives in harmony with it.

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 (Continued from page 7)

heard of bigger ones, but I wouldn't care to tangle with them.

No explanation of fishing methods is required for grindle. It will suffice to say that anything that will catch bass or pike will catch grindle too. I will point out that grindle have a preference for live bait, especially big minnows. Place your bait next to the weeds and clear the decks for action.

The longnose gar knows little affection among anglers. Like the grindle, he has the habit of showing up at the wrong place at the wrong time. Despite the preference of both grindle and gar for fish dinners, they are not considered to be villains in the Old Dominion fishing story.

A constant menace to most lakes is an overpopulation of very small or stunted fish. This is usually the result of highly prolific smaller fish "getting ahead" of the capability of the larger predatory fish to keep their numbers in check. Since the possibility of overpopulation is a more likely menace than the inroads on the fish population that could be made by grindle or gar, it is considered that these predators sometimes may do more good than harm. They are particularly helpful when the experts go to work on big bass, removing a quantity of them from a given lake. The gar and grindle then take over the bass's job for them, keeping the population of small fish in balance.

The longnose gar grows to a "right good" size. The largest on record weighed more than 50 pounds. They range over most the country from the east coast as far west as Montana and as far south as Florida.

If you translate the longnose gar's Latin name, you'll discover it means "bony scale" and it fits. This fellow has an armored hide that has dulled more than a few knives. Even his long, narrow snout is as tough as steel, being next to impossible to penetrate with a hook. More often than not, a gar caught on hook and line is "lassoed" when the snell of the hook gets a half hitch around his beak.

Down in Texas they've come up with a novel way of catching gar. They take a nine-inch length of plastic-covered clothesline and strip off about 7 inches of the hard plastic covering. The uncovered core is fluffed out and the remaining two inches of the covered clothesline is tied to the angler's line. When pulled through the water this affair is attractive to gar. When they strike at it, their teeth become tangled in the fluff and the rest is up to the angler.

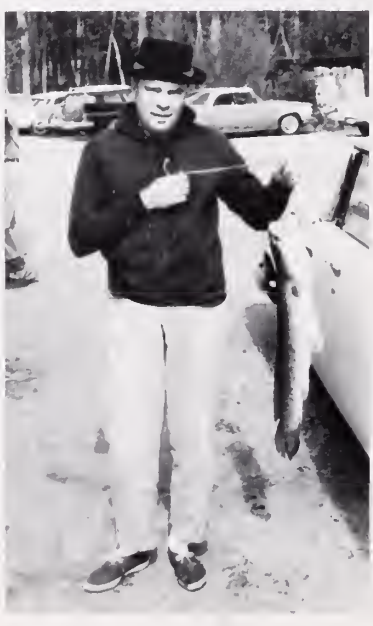
Gaffing a gar through its armor-plated hide is quite a trick.

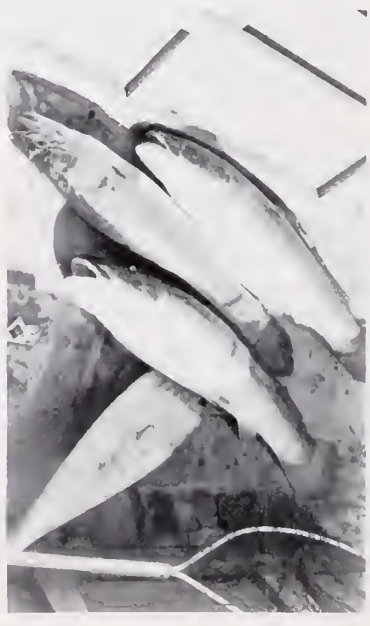
Like grindle, gar are capable of taking their oxygen directly from the air. A common sound in waters gar frequent is the "slurp" as gar rise to the surface for a quick swig of air.

I've wondered about the possibility of shooting rising gar with a bow and arrow but have decided against it. They present a target for so short a time that it would take the fastest draw in the East to hit them. That rules me out! Besides I haven't seen armor-piercing arrows as yet.

When it comes to giving fighting honors to our trio of warriors I give the nod to grindle for class, carp for power, but have nothing good to say about gar, which are frauds for their size.

All three of these ruffians have earned reputations as intruders—showing up when our minds and tackle were aimed at something a bit more fancy. But let's 'fess up—aren't those interruptions fun?





A large carp (left) from Chippokes Creek, off the James River; a big grindle (center) taken from Chickahominy Lake; and a trio of grindle that interrupted the author's bass fishing.

Photos by the author

Bird of the Month: Great Blue Heron

By DOCTOR J. J. MURRAY
Lexington

THERE are ten kinds of herons that may be seen in Virginia in summer, some of which also winter along the coast, but it is only the great blue heron can be found in any area of the state at any time of the year. To be sure, in midwinter it is quite uncommon in the northern and western parts of Virginia, but on the Christmas count at Lexington we rarely miss seeing one or more. At the Big Spring near Lexington it is a regular winter visitor.

With its wingspread of six feet, this is the largest of our Virginia herons, the largest but one indeed of the herons that can be found in North America. The great white heron, which in the United States is limited to extreme southern Florida, is slightly larger. The next heron in size, the common egret, is some five inches shorter. The great blue measures 42 to 52 inches from tip of bill to tip of tail. One of the best field marks, next to its great size, is the two-tone grayish-blue of its wings in flight. Another good mark is the huge bill.

This bird is often called a "crane." True cranes are never seen in Virginia today, although Dr. Alexander Wetmore has identified a bone of one from an Ice Age deposit at the Natural Chimneys in Augusta County. Cranes and ibises, two kinds of the latter being occasionally found in our state, fly with necks stretched straight out, while flying herons always fold their necks in a curve.

The great blue heron is a handsome, stately bird, a bird of dignity. Being so large, it does not move rapidly, but when disturbed at its feeding takes off with slow beats of its great wings and a harsh squawk.

Like most of the herons, it feeds in shallow water, walking quietly about until it sees a frog or a minnow, and then spearing its prey with a quick, deadly stroke. It eats fish, water snakes, frogs, insects, almost anything that it can pick up. One can scarcely imagine a more dangerous weapon than its heavy five-inch bill. Many years ago in the Midwest the skull of an Indian was found with the bill of a great blue heron imbedded in it. The Indian had come too close; the heron had struck with terrific force but in a place from which it could not disengage its bill; and bird and Indian had died miserably together.

This great bird nests in colonies in swamps, usually high in large trees, often several pairs in the same tree. Other herons may nest nearby but not usually in the same trees. The nest is a large platform of sticks, those at the base quite large, and lined with smaller twigs. The eggs, like those of most herons, are a dull blue, larger of course than those of its relatives. Usually three or four eggs are laid. Hatching requires about four weeks.

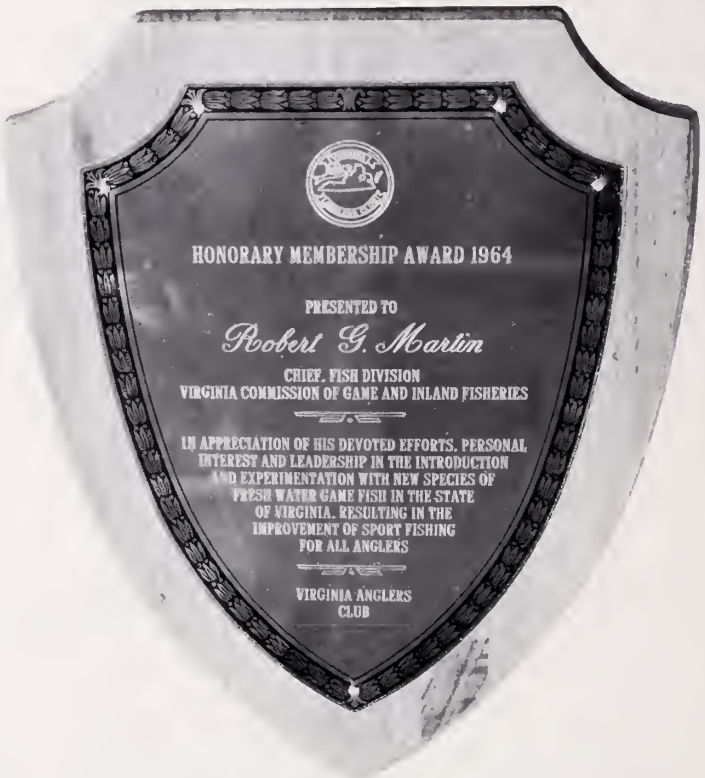
The rookeries that I have investigated on the South Carolina coast are very noisy, both the hungry young and the harassed parents contributing to the tumult. The amount of food growing young herons can eat is almost beyond belief, and the responsibilities of the parents, especially when they have to fly several miles to and from the hunting areas, are burdensome indeed.

Edited by HARRY GILLAM

New Campsite Digest

A new edition of the "Virginia Public Campsites" pamphlet published by the Game Commision is now off the press and available from hunting and fishing license agencies and sporting goods dealers throughout the state. The listings, although brief, include the location, general facilities offered, and the rates. Included in the listing are eight Game Commission Wildlife Management areas where camping is provided primarily for hunters and fishermen using these areas.

Also included are camping areas on state and federal public lands located throughout Virginia. This year's folder includes a much more comprehensive listing of private camp grounds than in the past. Single copies of the publication are available free from the sources indicated above or from the Game Commission office in Richmond.



Bass Equals Old Mark

The top largemouth mark for 1964 Freshwater Fish Citation entries has already been equalled by this 10 pound 13 ounce bigmouth taken by J. E. Czypinski of Norfolk March 3 of this year. Czypinski caught the big fish in Lake Smith on a cane pole and minnow. It is the largest fish to come from the lake in the past two years.

Martin Named Honorary Anglers Club Member

Robert G. Martin, chief of the Virginia Commission of Game and Inland Fisheries' Fish Division, was selected by the Virginia Anglers Club as the first recipient of its special "Honorary Membership" award. Martin's selection for this honor was based on his outstanding efforts in improving the fresh water fisheries of Virginia.

Among Bob's specific accomplishments cited were the introduction of muskellunge and northern pike into new Virginia reservoirs, and the development of "fish for fun" and "pay as you go" trout areas.

The award was presented at the club's annual banquet in Richmond. Martin received the attractive engraved wall plaque shown and a gold embossed honorary membership card. He is the first and only recipient of this award to date which, according to club officials, will be presented to other deserving individuals when circumstances dictate.

Martin receives plaque and congratulatory handshake from Virginia Anglers Secretary R. M. Ryckman, left.

Edited by DOROTHY ALLEN

Game Wardens Instruct Scouts

Franklin County Game Wardens Gordon Preston and J. D. Whittaker instruct members of Scout Troop 30 in wildlife management for Merit Badge. Seated is Scout Al Angle and standing, from left, Scout Colby Brown, Whittaker, Preston and Scout Dudley Woody. Seventeen boys attended the class.

Bird Project

Joe Bellamy, Chesterfield County Game Warden, visited Mrs. Weaver's fourth grade class at Midlothian School. After presenting a program on song birds, he gave each student a reprint on "How to build bird houses and bird feeders." The enthusiastic students decided to make a class project of constructing living and feeding quarters for the birds. The fourth graders not only became aware of the need for studying conservation, but they went a step beyond and actually did something about it. Mrs. Weaver deserves a lot of credit for encouraging and helping her students in a "doing'" conservation project.

The Virginia Game Commission would like to see more teachers include conservation activities and projects in their classroom work. In planning your next year's work try to schedule a conservation project. Write to the Education Division of the Commission of Game and Inland Fisheries, P. O. Box 1642, Richmond, Va. 23213, for reprints that are available to teachers free of charge.

Mrs. Weaver and her fourth grade pupils of Midlothian School proudly pose with their bird houses and feeders.

Mecklenburg's Feed Plots

The Mecklenburg County wildlife feed plots were so outstanding that the judges had to visit some of the plots a number of times to determine the winners. This annual project is sponsored by the South Hill and LaCrosse Ruritan Clubs in cooperation with the Game Commission and the Young Farmers Associations.

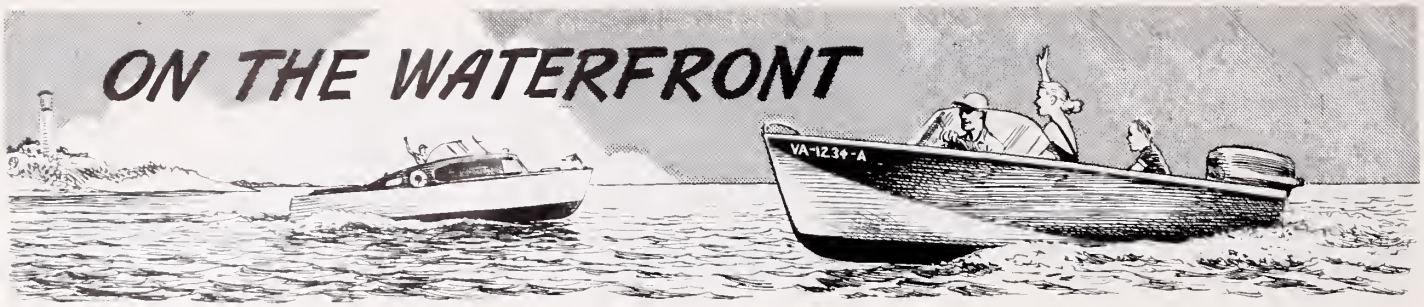
Winners in the Buckhorn area were: first, Delbert Blue; second, Steve Callis; third, Michael Wells; fourth, Charles Gordon; fifth, Bill Jennings. La Crosse area: first, Jerry Kinker; second, John D. Reese; third, Douglas Cumbia; fourth, Kenneth Lewis; fifth, Billy Kidd. South Hill area: first, Eddie Callahan; second, Milton Brooks.

For twenty-two years Mr. J. Byron Rockwell, Instructor of Vocational Agriculture, Park View High School in LaCrosse, has been doing an outstanding job in promoting conservation projects for the youth of Mecklenburg County. Each year he has encouraged students to study wildlife, participate in the wildlife essay contest and to plant feed patches. As Mr. Rockwell says, "These projects are stimulating our youth to become aware of the importance of conservation of our natural resources and it is hoped it will continue to remain with them throughout life."

Conference

Planning for Technical and Scientific Post High School Education in Virginia
Sponsored by the Virginia Academy of Science
John Marshall Hotel, Richmond
May 8, 1965
Saturday

It is generally recognized that post high school technical and scientific education is one of the major problems facing Virginia. This results not only from the world-wide knowledge explosion but also from the increased population of the post high school age group. In the recent past, the government and the legislature have undertaken new programs and studies in this area. The purpose of this conference is to discuss the needs and possible new directions under consideration to provide for them. The conference will confine itself to undergraduate post high school training with special consideration of the various possible two- and four-year curricula. *Public cordially invited.*



Edited by JIM KERRICK

New Boat Owner

Are you one of the fortunate persons who purchased a new outboard or inboard cruiser during the winter season? Despite the fact that you feel you are an experienced boatman, the responsibilities you purchased along with your boat are great.

As it has been said many times before, "Never have so many entered so blithely and with so little preparation into an activity in which experience is so important."

New boat owners must remember that seamanship does not come with the bill of sale; it is rather a matter of time and education.

Your boat dealer will for a few days be like your family doctor, and you will pay him numerous visits for guidance in the "Do's" and "Don'ts" of safe boating. Your dealer more than likely will supply you with a check list, not only to remind you of what you should do, but especially for your safety. He will train you in the proper way to launch and load your boat. He will show you how to mix the oil and gasoline. His guidance will include changing spark plugs, adjustment of the motor so that your boat will plane properly, how to approach a mooring site and the proper way to distribute your load within the boat. Of course this does not mean you are going to be a seasoned skipper after a few short visits to your dealer. What happens after this depends entirely on you. Will you as an inexperienced new boat owner attempt to obtain some type of schooling in the art of safe boating?

There is one thing that the dealer cannot give or sell you, and that is common sense. Common sense is something that only you can supply.

The more you practice the better skipper you will become. Obtain confidence in yourself; if you don't know something, find out. Don't say, "It can't happen to me." You should have knowledge of everything on board your boat —how it works and where it is. Don't pick a day when the water is rough to check out your boat. Pick a day when the water is smooth and there is no danger of a storm popping up. Keep in mind that you will use more fuel in heavy seas than on calm waters.

Don't venture too far from your mooring, or at least don't go into strange waters until you are confident you can bring the boat home safely under any circumstance.

When checking out your boat take your first mate along so she may become familiar with location of gear, steering device, starter and throttle in the event something should happen to you.

Remember the dealer is a direct line between you and your success in becoming a safe skipper. Rely on him and carry out his suggestions.

Again this reminder: If you don't know, ask for help or assistance. You have not only the responsibility of yourself and passengers, but the responsibility of every other boater on the water. Have a safe and sane cruise.

Old Enough to Know Better

On a nice sunny day an elderly gentleman who could not swim, and who suffered from dizzy spells, took a boat ride with friends. He apparently became dizzy, fell overboard from the outboard boat, and drowned. He was not wearing a lifejacket.

Diver's Flag

How would you like to be diving for sport, in shallow water, and suddenly realize that a powerboat up above was practicing high speed turns and apparently using the flag marking *your* underwater position as a pylon? Or how would you, as operator of a boat, like to feel your propeller hit an underwater object, and *only then* realize that the little red flag with diagonal stripe was floating there to protect a diver and not to attract motorboats?

Such nightmares can become reality, unless boat operators recognize and steer clear of the diver's flag. During a recent underwater operation right here in Virginia, in which a new diver was being introduced to salt water diving, an unidentified motorboat intentionally buzzed the diver's flag at high speed. The flag was being towed on the end of a twenty foot line by the senior diver, to mark the diver's position underwater and warn boats away. The precaution, coupled with the ignorance or criminally negligent disregard displayed by the boat operator, very nearly resulted in a horrible tragedy.

The diver's flag, internationally recognized and adopted by the Underwater Society of America, is bright red with a diagonal white stripe running from the top of the hoist to the bottom of the fly. It may be displayed from a stationary boat, ship, or float from which diving operations are being conducted; or from a stationary buoy or a free float towed by a diver by use of a line.

Whenever divers are operating underwater it should be prominently displayed. Wherever it is seen, boat operators should steer well clear of the area and operate with extreme caution. More than mere courtesy and respect for another's sport are involved. A diver's life is at stake. His only means of protecting himself is in letting people on the surface know where he is. The rest is up to the boat operators. Learn to recognize the diver's flag, watch out for it, and stay away from it!

DIVERS FLAG

"The Opportunity to be in Contact with Beauty—"

For centuries Americans have drawn strength and inspiration from the beauty of our country. It would be a neglectful generation indeed... which failed to preserve and extend such a heritage for its descendents....

The modern technology, which has added much to our lives, can also have a darker side... The air we breathe, our water, our soil and wildlife, are being blighted...

To deal with these new problems will require a new conservation.... Its concern is not with nature alone, but with the total relation between man and the world around him....

In this conservation the protection and enhancement of man's opportunity to be in contact with beauty must play a major role.

This means that beauty must not be just a holiday treat, but a part of our daily life....

Certainly no one would hazard a national definition of beauty. But we do know that nature is nearly always beautiful. We do, for the most part, know what is ugly. And we can introduce, into all our planning, our programs, our building and our growth, a conscious and active concern for the values of beauty....

(*From President Lyndon B. Johnson's message to the Congress, February 8, 1965.*)

Know These Fi

Answers: (1) Rainbow Trout, (2) Smallmouth Bass, (3) Rock Bass (Redeye), (4) Bowfin (Grindle), (5) Brook Trout, (6) Chain Pickerel, (7) Gizzard Shad, (8) Channel Catfish, (9) Bluegill, (10) Brown Trout